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TITLE: Method of constructing full-length target cDNA molecules

BSPR:
Molecular cloning of cDNAs was first reported by Rougeon and Mach, PNAS USA 73, 3418-3422 (1976) and by Efstradiadis et al., Cell 7, 279-288 (1976). Since then, the technology has continued to be refined. Library cloning techniques are now commonplace and described in textbooks, such as, MOLECULAR CELL BIOLOGY, Darnell, Lodish and Baltimore (second edition, Scientific American Books, Inc., 1990). These techniques generally start with total RNA from cells. Generally, it is preferable to use mRNA from cells believed to synthesize the target protein. To make the complimentary DNA (cDNA), a short primer strand is hybridized to the mRNA near the 3' end. Most eukaryotic mRNA have a 3' poly(A).sup.+ tail, therefore, the primer is often poly(dT). Reverse transcriptase is then employed to add nucleotides to the primer to generate a cDNA, a DNA copy of the RNA molecule. The newly generated cDNA is called the first strand cDNA. The mRNA is then removed from the first strand cDNA, leaving the single stranded cDNA.